

AMENDMENTS

IN THE CLAIMS:

Please amend claim 15 to read as follows:

15. (amended) A method of screening for an inhibitor of acetyl-CoA carboxylase 2 isoform activity, comprising the steps of:

administering a potential inhibitor to one or more wild type mouse; and

screening said one or more mouse for a phenotype exhibited by a transgenic mouse, said phenotype comprising:

a1 a metabolic reduction in malonyl-CoA production in skeletal muscle and heart;

unrestricted fat oxidation and reduced fat accumulation in the liver and fat storage cells; and

consuming more calories than said one or more wild-type mouse.

Please add new claim 24 to read as follows:

a2 24. (new) The method of claim 15, wherein said transgenic mouse has a mutation in an endogenous ACC2 gene for the acetyl-CoA

carboxylase 2 isoform of acetyl-CoA carboxylase, said mutation inactivating said gene thereby resulting in a lack of expression of a functional acetyl-CoA carboxylase 2 isoform.

Please add new claim 25 to read as follows:

25. (new) The method of claim 24, wherein one or more exons of said ACC2 gene has been deleted.

Please add new claim 26 to read as follows:

26. (new) The method of claim 25, wherein said exon(s) have been replaced with heterologous DNA sequences.

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Please add new claim 27 to read as follows:

27. (new) The method of claim 26, wherein said heterologous DNA sequences comprise an hypoxanthine phosphoribosyltransferase expression cassette.

Please add new claim 28 to read as follows: